USER MANUAL

GHOST-EYE™
CINEGEARS
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150M KIT

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400M KIT

GHOST-EYE™ WIRELESS HDMI/SDI VIDEO TRANSMISSION SUITE

GHOSTEYE 400M KIT

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Full HD Video

SDI & HDMI

Very Low Latency

Plug & Play

Rugged Design

EU Environmental Protection

Waste electrical products should not be disposed of with household waste.Please recycle where facilities exist.Check with you local authority or retailer for recycling advice.

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PAP

GHOST-EYE™ WIRELESS HDMI/SDI VIDEO TRANSMISSION SUITE

Cautions

NOTICE

This instructional user manual and all the related documents are subject to change at the sole discretion of SFAIMO INC.. SFAIMO reserves the right to make changes and improvements to any of the products described without prior notice. Under no circumstances shall SFAIMO be responsible for any loss of income or any special, incidental, consequential or indirect damages howsoever caused. For up-to-date product information, visit https://www.ghosteye.com on the support page.

WARNING

Please read this user instruction manual to become familiar with the features of GHOSTEYE series before operating. Failure to operate the product correctly can result in damage to the product or interfere to other devices. This is a sophisticated product which must be operated with caution and common sense. Failure to operate this product properly might result in disturbing some other equipment on the film set. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the documents provided by GHOSTEYE.These Safety Guidelines contain instructions for installation, operation and maintenance. It is essential to read and follow all of the instructions in this manual and all the notices and warnings in about 150M and 400M as well, prior to assembly, setup or use, in order to operate the product correctly and avoid damage or interfering.

1.Do not use this product in the extreme hot, cold, dusty or humid environments.
2.Prevent friction with hard objects.
3.Avoid the product falling down from a high place, or it may damage the hardware.
4.The product is not water proofed. So do not get any liquid into the unit please.
5.Do not dismantle, assemble or alter the product arbitrarily

Important Information

Please read this user manual before you use this product, it contains all the notes and important things regarding operating this product. In accordance with the safety precautions and operating instructions listed on this user manual, our applies provided the product is handled properly for its intended use, but may not apply to below cases:

- Repairs or product modification and alterations have been executed by unauthorized personnel.
- The damages are caused by accidents including but not limited to lightning, fire, exposed to rain or water,and moisture.
- Do not use provided power adapter with specific power voltage which are not compliant with the rated voltage range in the attached label of the power adapter in package.
- The model label on the product has been modified or the warranty tag has been removed by unauthorized personnel.

Safety Precaution

Danger! High voltage	To reduce the risks of electricity, do not remove or open the cover. No user-serviceable parts are inside. Please return to original factory for maintenance
Beware of hot surfaces!	The high temperature in the process of operating the device may cause the high risk of scalding.
Caution!	Please use our standard power adapter.Detailed information Please refer to the rated voltage range showed on the label at the back of package's power adapter.

Danger: Be careful with electricity.

- As connecting any equipment (such as any player or TV , etc.), please turn off the power to the product before any operation is undertaken.
- Power outlet:To prevent electric shock or fire, short circuit, please make sure the type of electrical plug used on the receiver's and transmitter's power cord are compliant with the rated voltage range in the attached label of the power adapter in package.
- Power cord: Do not place any heavy articles above on the power cord. To avoid being stepped on or pinched by heavy items, the power cord should not be located on the place where people pass by frequently.
- Power overloading: Avoid overloading wall's electrical outlets and extension cord or other multi-socket; otherwise could result in electric shock or fire.
- Lightning: For protection from lightning or when the product is left unattended for a long period, please disconnect it from the power source.
- Please disconnect the power cord from the power outlet when you are not using the receiver and transmitter, this will reduce the risk of electric shock or fire.

Warning

- This product should not be exposed to dripping or splashing. Do not place any object filled with liquid on the product(eg. vases).
- To avoid electric shock, please do not block or stick anything on the air vent of product; do not remove the cover or put the object just like pins, steel wire into the gap of the air vent.
- Please place the receiver/ transmitter on a flat with hard and stable surface.
- Ventilation: please do not block the air vents on the receiver/transmitter or place any heavy object on top of them . Blocking the air flow can damage the product itself. Please make sure that there is adequate ventilation distance between the receiver and TV, and also put the product away from direct sunlight or any source of heat.
- Water Exposure: To reduce the risk of electric shock or fire , please do not expose the receiver/transmitter to rain or moisture.
- We assume no responsibility for any damage or result caused by using other adapters instead of our standard adapters

Special Notice

- Although the product has provided the function of data encryption when transmitting, you still need to pay attention to deliberate signal interception. There will be the Possibility of a third party intentionally intercept the transmission signal since the product adopt wireless communication. Please do not use the product on confidential and important communications, or life-related communications The main concern is that the content of wireless communication might be received by the third party's wireless devices deliberately or accidentally.
- The impact of radio waves (such as the following environment may cause the abnormal audio and video(blocked image, noise ...etc.).
  1) Transmit near the wall which is hard for the radio waves to get through.
  2) Quite close to the refrigerator, metal fitment and appliances, or next to the crowded situation.
- This product has been tested and manufactured to comply with national electrical safety rules, however, there will be noise caused by the interference with other machines in rare cases. If the interference is happened, please keep a certain distance away from other machines.
- The product is susceptible to interference from 5GHz wireless local area network or other wireless devices.
- Optimal range between transmitter and receiver is between 1 meter and 300 meters within line of sight.
- Please do not set up the transmitter and receiver in metal shelf, or it will hinder the wireless communications.
- 1080P/60Hz Wireless transmitting.
- It will take 15-20 seconds to boot the system before wireless communication start, the media receiver can not be operated during this time.

Brief Introduction

The system is designed to replace the current widely used cables in the live broadcasting and production environments. Cables always suffer from wiring hassles and sometimes just impossible to have cables. This wireless HD video transmission system supports good wireless coverage, plug and play, industry standard power and video interfaces and will provide you State-Of-Art picture quality with very low latency in both indoor and outdoor applications.

The Wireless HD Video Link system can be used in film production, live broadcasting as well as many other applications which requires good quality wireless video connections such as wedding and conferences.

Features

- 5GHz ISM Band Wireless HD Video transmission.
- Supports multiple channel switching and broadcast mode for 1 transmitter to multiple receivers.
- Supports up to 1080p/60Hz resolution, HDMI/HD-SDI/3G-SDI 4:2:2, 10bits color depth.
- Uncompromised picture quality with very low latency <30ms.
- Effective range: 300m/1000ft. (Line of sight).
- HDMI 1.3 with EDID support.
- Plug & Play – fully hardware design, no software is required.
- AES128/256 Encryption.

What is included

Please check the packing list carefully after unpacking, if any part is missing, please contact your dealer.

Wireless HD
transmitter X 1

Antennas X 2

P-Tap to Lemo 2-pin
Power Cable
X 1

Hot-shoe
Stand x 1

DC Adapter X 1
12V 2A Lemo 2 pin
* Optional

V-Mount X1
* Optional

Wireless HD
Receiver X 1

Antennas X 5

HDMI Cable X 1

Hot-shoe
Stand x 1

DC Adapter X 1
12V 2A Lemo 2 pin

V-Mount X1
* Optional

P-Tap to Lemo 2-pin
Power Cable X 1
* Optional

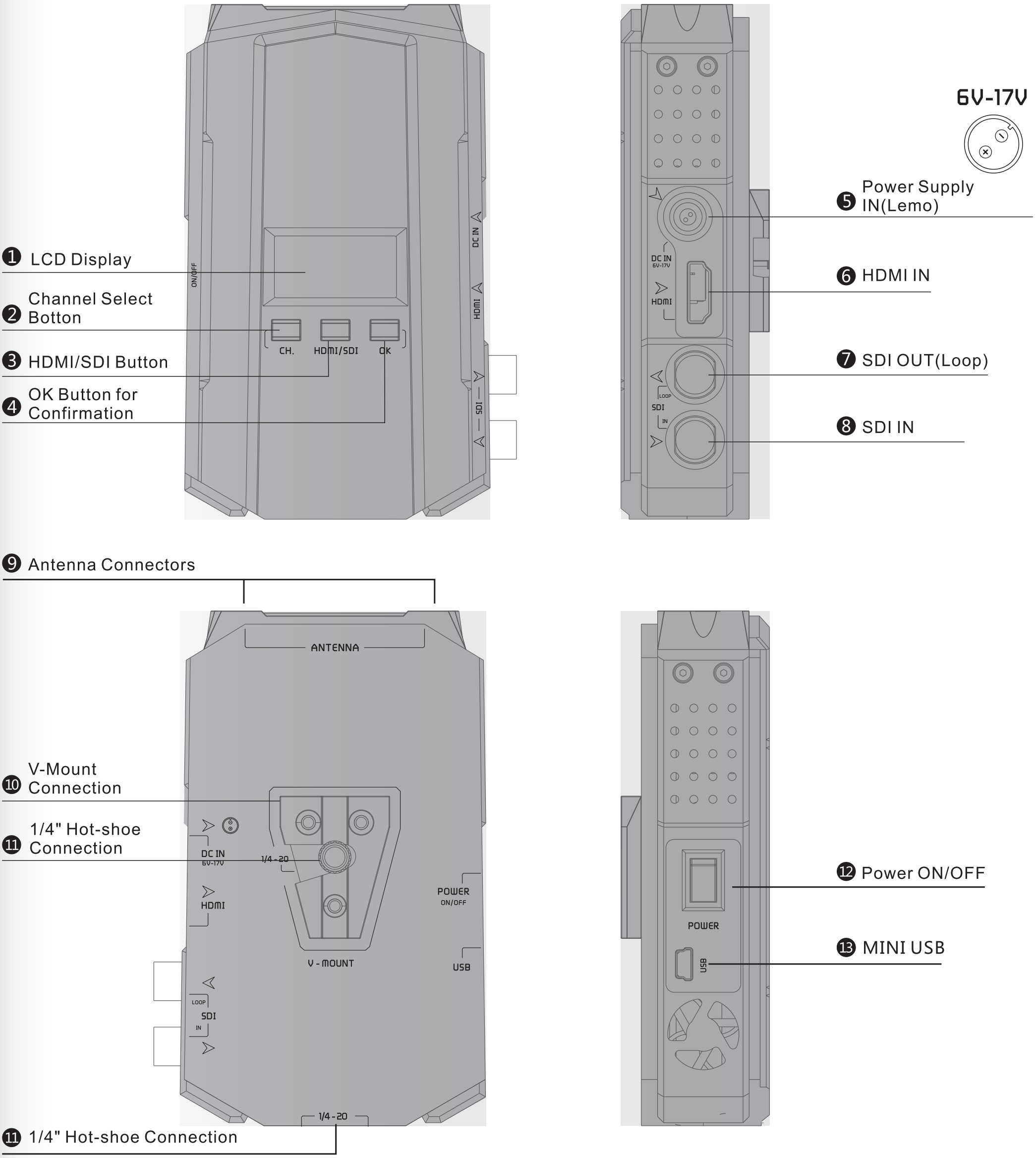
* Accessories in package may vary according to certain conditions in different country/region, please check out the conten

Specifications

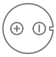
ITEM	Specification
Frequency	5.1~5.9 (GHz) * Subject to different RF regulations in different regions
Bandwidth	40MHz
Video Formats	1080p 23.98/24/25/30/50/60 1080psf 23.98/24/25 1080i 50/59.94/60 720p 50/59.94/60 576p 576i 480p 480i
Audio Formats Supported	PCM, DTS-HD, Dolby TrueHD
Time Code	SMPTE-12M
Transmission range	>300m (Line of sight)
Transmitter	
Antenna	External Antenna X 2 pcs
Transmission Power	20dBm
Functional Interface	HDMI Input; SDI Input; SDI Loop Output; Mini USB; LEMO Power IN; Antenna RPSMA Socket, Power ON/OFF
Mounting Structure	1/4" Hot-shoe connection; V-Mount * Optional
LCD Display	Wireless Channel Info; SDI/HDMI Input Info; Signal status; Power Info
Working Voltage	6V~17V
Power Consumption	7~8W
Dimensions	119x79x32 mm
Temperature	-10 ~ 60°C (Operating) ; -40 ~ 80°C (Storage)
Receiver	
Antenna	External Antenna X 5 pcs
Receiving Sensitivity	-70dBm
Functional Interface	SDI Dual Output; HDMI Output; Mini USB; LEMO Power IN; Antenna RPSMA Socket, Power ON/OFF
Locating Structure	1/4" Hot-shoe connection; V-Mount * Optional
LCD Display	Wireless Channel Info; SDI/HDMI Input Info; Signal status; Power Info
Working Voltage	6V~17V
Power Consumption	7~8W
Dimensions	155x111x32 mm
Temperature	-10 ~ 60°C (Operating) ; -40 ~ 80°C (Storage)

* Since the product's improving process , all the performance , design and specifications of our products are subject to minor change without prior notice.

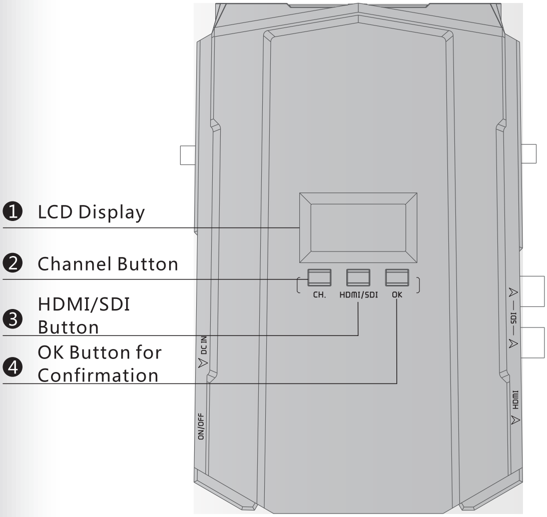
Transmitter mechanic information

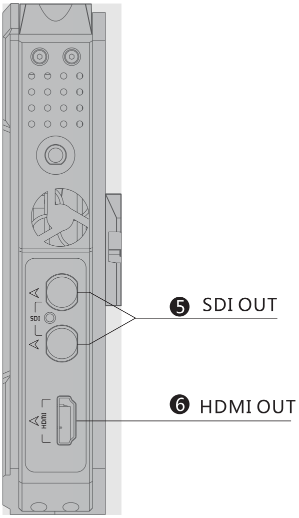

❶ LCD Display
❷ Channel Select Botton
❸ HDMI/SDI Button
❹ OK Button for Confirmation
CH.
HDMI/SDI
OK
ON/OFF
DC IN
HDMI
SDI
6V-17V
❺ Power Supply IN(Lemo)
❻ HDMI IN
❼ SDI OUT(Loop)
❽ SDI IN
DC IN 6V-17V
LOOP
IN
❾ Antenna Connectors
ANTENNA
❿ V-Mount Connection
⓫ 1/4" Hot-shoe Connection
1/4 - 20
V - MOUNT
POWER ON/OFF
USB
⓫ 1/4" Hot-shoe Connection
⓬ Power ON/OFF
⓭ MINI USB
POWER

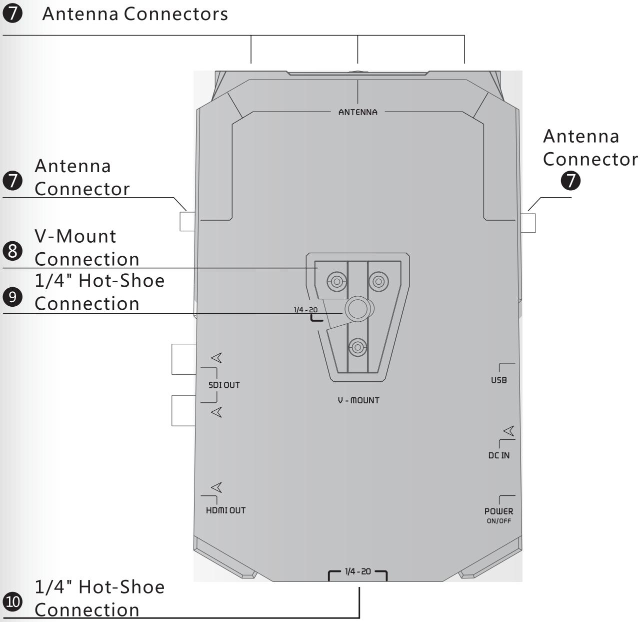
Structure

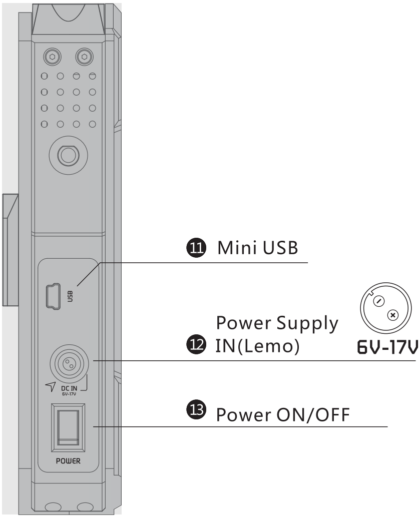
1	LCD Display
	Displays information of Channel, input selection, signal status and battery capacity
2	Channel Select Botton
	Select the same channel to RX
3	HDMI/SDI Button
	Select HDMI or SDI INPUT from signal source
4	OK Button for Confirmation
	Confirm the Selection
5	Power Supply IN(Lemo) * Support 6-17V
	Support connecting to the power supply of the camera, or power adaptor Notice: BE AWARE OF POLARITY BEFORE APPLIES TO POWER SUPPLY! 
6	HDMI IN
	Connect to the HD Video Source with HDMI Input
7	SDI OUT(Loop)
	Connect to the HD Digital Monitor which support 3G-SDI, HD-SDI
8	SDI Input
	Connect to the video source which support 3G-SDI, HD-SDI
9	Antenna Connectors
	RPSMA connectors for antennas
10	V-Mount Connection * Optional
	Supports V-Mount Connection
11	1/4" Hot-shoe Connection
	Supports Hot-shoe Mounting
12	Power ON/OFF
	Power ON/OFF
13	Mini USB
	For System Upgrading

Receiver mechanic information


❶ LCD Display
❷ Channel Button
❸ HDMI/SDI Button
❹ OK Button for Confirmation
CH.
HDMI/SDI
OK
DC IN
ON/OFF
SDI
HDMI


❺ SDI OUT
❻ HDMI OUT
SDI
HDMI


❼ Antenna Connectors
ANTENNA
❼ Antenna Connector
Antenna Connector ❼
❽ V-Mount Connection
❾ 1/4" Hot-Shoe Connection
1/4-20
SDI OUT
V-MOUNT
USB
DC IN
HDMI OUT
POWER
ON/OFF
1/4-20
❿ 1/4" Hot-Shoe Connection


⓫ Mini USB
USB
⓬ Power Supply IN(Lemo)
6V-17V
DC IN
6V-17V
⓭ Power ON/OFF
POWER

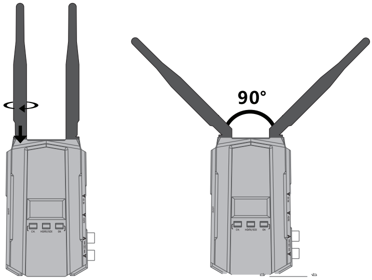
Structure

1	LCD Display
	Displays information of Channel, input selection, signal status and battery capacity
2	Channel Select Button
	Select the same channel to TX
3	HDMI/SDI Button
	Select HDMI or SDI OUTPUT to the display device.
4	OK Button for Confirmation
	Confirm the Selection
5	SDI OUT
	Connect to the HD Digital Monitor which support 3G-SDI, HD-SDI
6	HDMI OUT
	Connect to the HD Display TV/Monitor with HDMI Input
7	Antenna Connectors
	RPSMA Connectors for Antennas
8	V-Mount Connection * Optional
	Support V-Mount Connection
9 ,10	1/4" Hot-shoe Connection
	Supports Hot-shoe Mounting
11	Mini USB
	For System Upgrading
12	Power Supply IN(Lemo) * Support 6-17V
	Support connecting to the power supply of the camera, or power adaptor Notice: BE AWARE OF POLARITY BEFORE APPLIES TO POWER SUPPLY!
13	Power ON/OFF
	Power ON/OFF

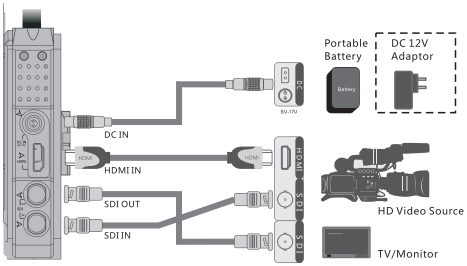
Installation

For transmitter

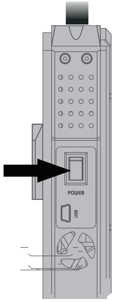
1. Fix the antennas to the transmitter, and arrange them to be right angle as figured below to get better performance.


90°
CH.
HDMI/SDI
OK

2. Connect the transmitter to the power supply. Connect the SDI/HDMI cable to the Video Source.

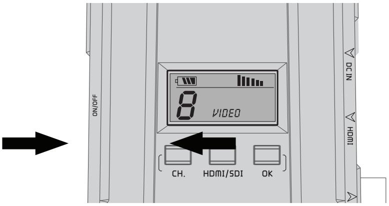

Portable Battery
Battery
DC 12V Adaptor
DC
6V-17V
DC IN
HDMI
HDMI IN
SDI OUT
SDI IN
SDI
HD Video Source
TV/Monitor

3. Turn ON the power supply and make sure the transmitter start to work.



4. Press the “CH” button to select the wireless channel that corresponding to the Receiver, then press the “OK” button to confirm.
   When the video is transferred, the LCD Screen will display “VIDEO”.

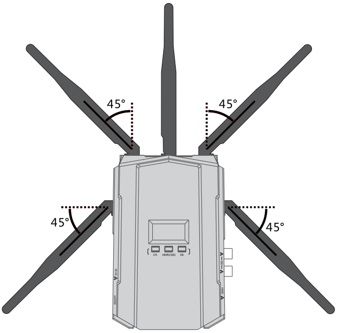
   Note: The devices support broadcasting mode as factory setting. User just need to set the TX & RX to the same channel and the RX device will be linked wirelessly to TX.


ON/OFF
8
VIDEO
CH.
HDMI/SDI
OK
DC IN
HDMI

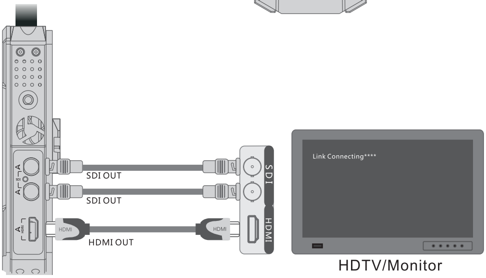
Installation

For Receiver

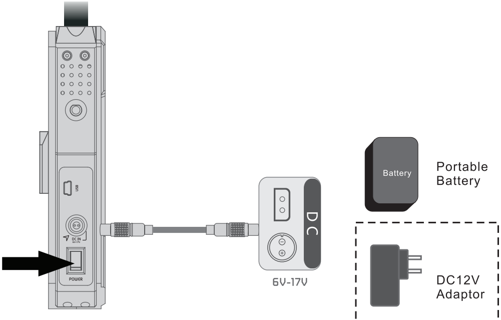
1. Fix the antennas to the transmitter, and arrange them to be right angle as figured below to get better performance.


45°
45°
45°
45°
CH.
HDMI/SDI
OK

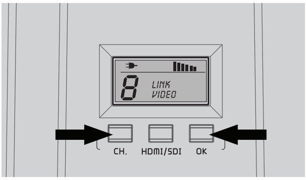
2. Connect the SDI/HDMI cable to the TV/Monitor.


SDI OUT
SDI OUT
HDMI OUT
HDMI
HDMI
SDI
HDMI
Link Connecting****
HDTV/Monitor

3. Connect the receiver to the power supply via the power cable. then turn ON the power supply and make sure the receiver start to work.


USB
DC IN
POWER
DC
6V-17V
Battery
Portable Battery
DC12V Adaptor

4. Press the “CH” button to select the wireless channel that be the same to the Transmitter, then press the “OK” button to confirm. When the Networking is connected, the LCD Screen will display “LINK”. When the video is transferred, the LCD Screen will display “VIDEO”; Then the screen of TV/Monitor will display the HD images simultaneously from the video source.


8
LINK
VIDEO
CH.
HDMI/SDI
OK

Trouble shooting

	Troubles & Possible Reasons:	Solutions:
OSD Information on TV	**Displaying "Link Connecting..." for a long time**	
	Transmitter is not powered up.	Power on the transmitter.
	Transmitter or receiver is not placed correctly.	Place the TX or RX correctly.
	The transmitter and receiver are too far away.	Move the receiver closer to the transmitter.
	Several solid wall partition TX and RX.	Reduce the number of solid walls between TX and RX.
	There are too many obstacles between TX and RX.	Move the receiver closer to the transmitter.
	Other transmitter is working on the same or adjacent channel	Turn off other transmitter, or change channel.
	No Video Signal received	
	Transmitter and video source are not connected.	Connect the transmitter to video source by SDI/HDMI cable.
	The video source is turned OFF.	Power ON the video source.
	Video source were NOT switched to SDI/HDMI output.	Switch the Video source to SDI/HDMI output.
	Bad contact of cable of transmitter	Remove and then re-plug the cable of transmitter
	Abnormal working of transmitter	Reboot the transmitter.
	Problem with cable between TX and video source	Change the SDI/HDMI cable.
	Player NOT support the output resolution format.	Switch the output video resolution to other modes.
	The TV/Monitor NOT support HDCP authentication.	Replaced with HDCP-certified TV/Monitor.
Image	**No signal input to Receiver or TV/Monitor**	
	Receiver is turned OFF.	Power on receiver.
	Receiver and TV are not connected.	Connect receiver to TV/Monitor via SDI/HDMI cable.
	TV/Monitor NOT switched to SDI/HDMI input.	Switch TV/Monitor to SDI/HDMI input.
	Bad contact of the cable of receiver or TV/monitor	Remove then re-plug the SDI/HDMI cable.
	TV/Monitor turn into standby mode	Switch the TV/Monitor to normal operation mode.
	Abnormal working of receiver.	Reboot the receiver.
	No image appear on TV/Monitor	
	Bad contact of receiver or cable.	Re-plug the cable of the receiver or TV/Monitor
	Abnormal working of receiver	Reboot the receiver
	Receiver failure	Please contact your retailer
	Abnormal color on TV screen	
	Bad contact of cable of receiver or TV/moniter.	Unplug and then plug the HDMI cable of the receiver or TV.
	Bad contact of cable of transmitter or video source.	Unplug and then plug the HDMI cable of the TX and player.
	Abnormal working of transmitter or receiver	Reboot the transmitter and receiver.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:-Reorient or relocate the receiving antenna. Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help. To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, includinginterference that may cause undesired operation.

Cautions!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modificationscould void the user authority to operate the equipment.

GHOSTEYE 150M KIT

GHOST-EYE™ WIRELESS HDMI/SDI VIDEO TRANSMISSION SUITE

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CINEGEARS
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CINEGEARS

Full HD Video

SDI & HDMI

Very Low Latency

Plug & Play

Rugged Design

EU Environmental Protection

Waste electrical products should not be disposed of with household waste.Please recycle where facilities exist.Check with you local authority or retailer for recycling advice.

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■ Product model and standard

The Long Range Wireless HDMI/SDI Transmission Suite utilize today's most advanced wireless video transmission technology, which can realize the broadcast-class and uncompressed 3G SDI/HDMI HD video signal transmitted with no compression and zero delay. The suite include one transmitter and one receiver, where the transmitter provides a 3G/HD SDI input and a HDMI input, and the receiver also provide a 3G/HD SD output and a HDMI output. The wireless HD suite has 2 stick antennas in transmitter side, and 5 internal antennas in receiver side, and it can work in 5.1-5.9GHz frequency band and be flexibly software configured to licensed or ISM band of global different regions, as well as the side panel of both transmitter and receiver has been installed a frequency select knob, which provide maximum 10 workable frequency channels, and support maximum 4 sets working simultaneously. The wireless suite can accept wide range DC power input, which is suitable for many kinds of camera battery model. The suite also can sustain ±8 kV ESD (HBM, contact discharge), the industry class metal case and professional heat design would guarantee most robust reliability.

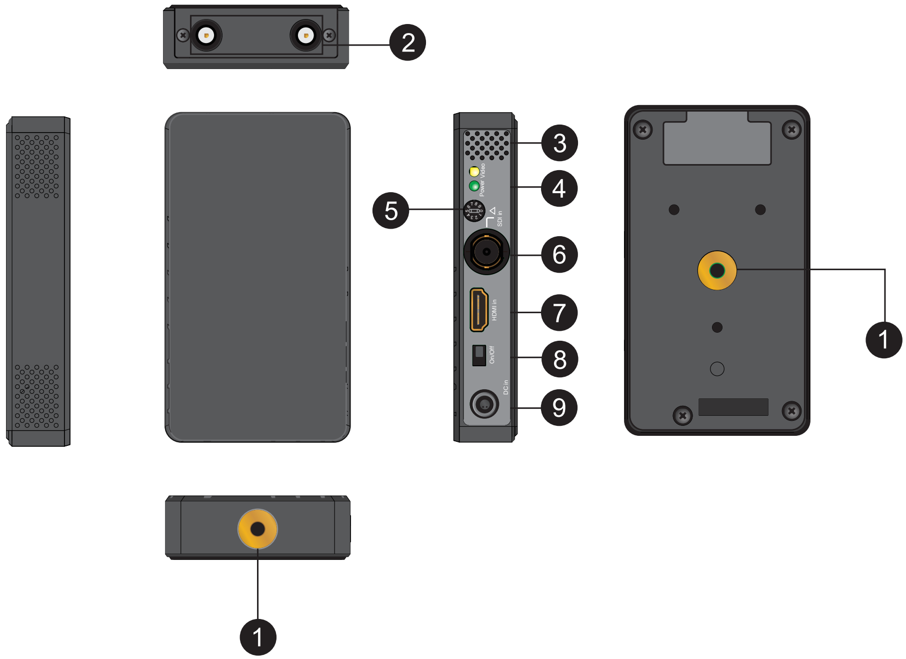
■Main features:

- HDMI 1.3 spec supports
- HDMI and SD/HD/3G SDI input and output
- Highest resolution 1080p 60,no delay and no compression
- Support audio formats include Dolby True HD, DTS-master, etc.
- AES-128 encryption with air interface HD video data stream
- Support point to point, and point to multi point network topology
- 5GHz ISM frequency band, maximum 10 frequency channel selected by user knob, coexist with WIFI.
- RX built-in antenna, more compact
- Maximum transmission distance 120m
- Signal indicators for wireless power status, Video status and receiver RSSI
- Wide range power voltage input, adapt most kinds of camera battery
- Optional Sony F970 battery buckle, convenient for field battery install and replacement
- Any input and output ports with ±8 kV ESD protection level (HBM, contact discharge)
- Industrial metal case, stable and reliable

■Parameters:

	Transmitter	Receiver
Interface	SDI Input（BNC Female）; HDMI Input (Type A female) ; 2 Antenna port(RP-SMA male） ; DC input	SDI Output（BNC Female）; HDMI Output (Type A female); DC input
Supply voltage range	7-36V DC	7-36V DC
Power consumption	< 6 W	< 7 W
Size	(L x W x H): 115x 67 x 23mm don’t include antennas	(L x W x H): 152x 95 x 23mm
Mass Weight	270g	355g
Input Video Format	HDMI:525i, 625i, 720p 50/59.94/60, 1080i 50/59.94/60, 1080p23.98/24/25/29.9/30/50/59.94/60;HDMI Type A SDI:3G, HD, and SD-SDI (auto-selected), SMPTE-259/274/292/296/372/424/425;1x BNC	/
Output Video Format	/	HDMI:525i, 625i, 720p 50/59.94/60, 1080i 50/59.94/60,1080p23.98/24/25/29.9/30/50/59.94/60;HDMI Type A SDI:3G, HD, and SD-SDI (auto-selected), SMPTE-259/274/292/296/372/424/425; 1x BNC
Input Audio Format	SDI embedded 2 channel 24 bit/48KHz	/
Output Audio	/	SDI embedded 2 channel 24 bit/48KHz
Signal Indicator	POWER-Green; VIDEO-Yellow	POWER-Green; Wireless RSSI-Blue (4 LEDs); POWER/VIDEO-Yellow
Frequency Band	5.1-5.9GHz,configurable with China, North American, Europe,etc	5.1-5.9GHz,configurable with China, North American, Europe,etc
Modulation Mode	OFDM 16QAM	OFDM 16QAM
Transmission Power	Maximum 18dBm	/
Receiver Sensitivity	/	-75dBm
Occupied Bandwidth	40MHz	40MHz
Temperature Range	0~40°C(operating condition); -20~60°C(Storage)	0 ~ 40°C (operating condition); -20~60°C(Storage)
Compliance	FCC; CE.	FCC; CE.

■Parameters:


2
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4
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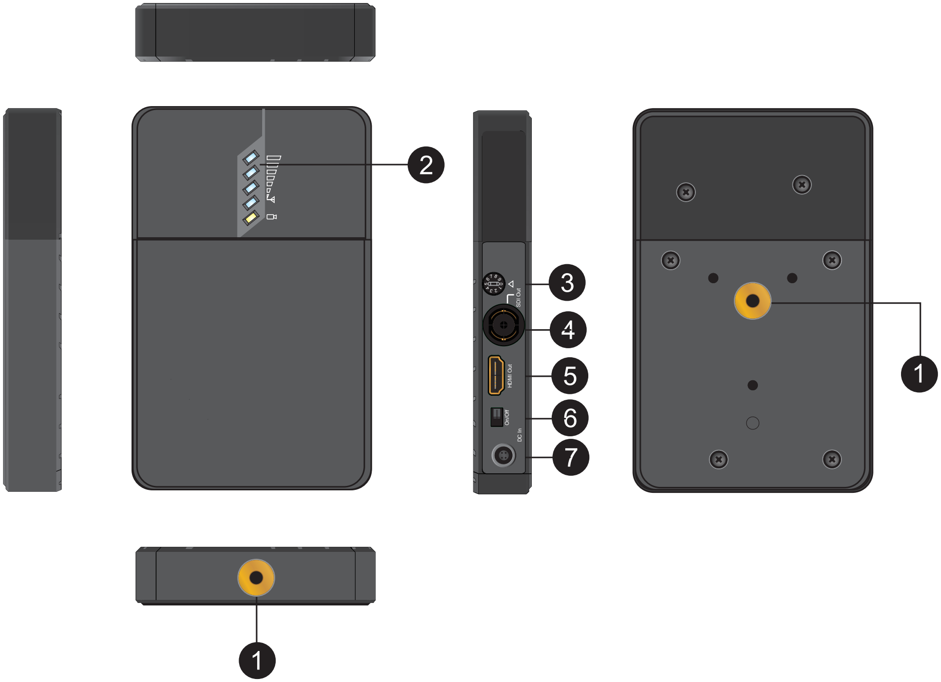
7
8
9
1
Power
Video
SDI in
HDMI in
On/Off
DC in
1

Transmitter

1) 1/4-20 Screw Hole
2) RP-SMA male antenna connector
3) Video input indicator, 1 yellow LED
4) Power on Indicator, 1 green LED
5) Frequency selection knob,0-9
6) SD/HD/3G SDI input
7) HDMI Input
8) DC power switch
9) DC input, LEMO 4-pin B series connector

Parameters:


2
3
SDI Out
4
HDMI Out
5
On/Off
6
DC In
7
1
1

Receiver

1) 1/4-20 Screw Hole

2) LED status indication(4 blue LED for RSSI &1 LED yellow for POWER/VIDEO)

3) Frequency selection knob,0-9

4) SD/HD/3G SDI output

5) HDMI output

6) DC power switch

7) DC input, LEMO 4-pin B series connector

■What is included

- ●1 unit transmitter
- ●1 unit receiver
- ●SONY NP-F970/PananonicD28s/Canon 5D2 batter buckle (Optional)
- ●2 pcs 5GHZ omni-directional and high efficiency antennas (SMA female)
- ●1 user manual
- ●310*190*93mm water-proof foamed case

Installation details and cautions

- Transmitter side

a) Install 2 Omni-directional and high efficiency antennas to transmitter's RP-SMA female antenna connectors.

b) There is one1/4-20 screw in transmitter metal case, which are located on the bottom of case. So the user can utilize a 1/4 screw to ISO518 hot-shoe converter fix the transmitter into camera.

c) Install battery into battery buckle if your product model includes battery buckle options; please note the battery model must match the battery buckle type.

d) The user can also utilize a subsidiary D-type to 3mm screw female DC jack cable to get power input from an outside power source.

e) All TX installation guidelines see below figure.

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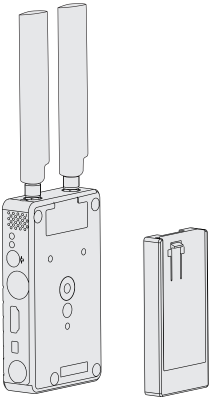

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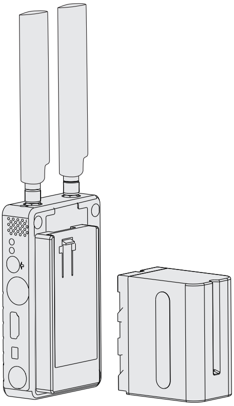

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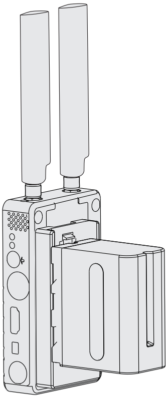


Installation

●Receiver side

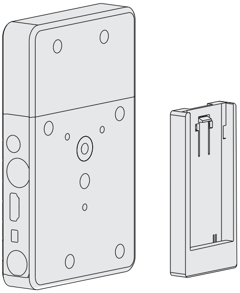
a) There is one 1/4-20 screw nut in the bottom side of receiver. The user can utilize a 7" articulating arm and crab clam to install the receiver on one tripod.

b) Install battery into battery buckle if your product model includes the option of battery buckles; please note the battery model must match the battery buckle type.

c) The user can also utilize a subsidiary D-type to 3mm screw female DC jack cable to get power from an outside power source.

d) All RX installation guidelines see below figure.

①



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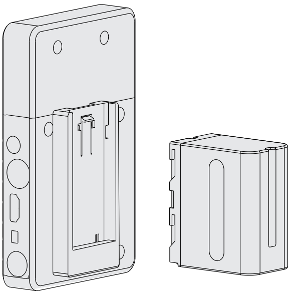

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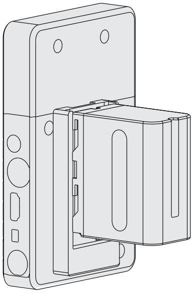
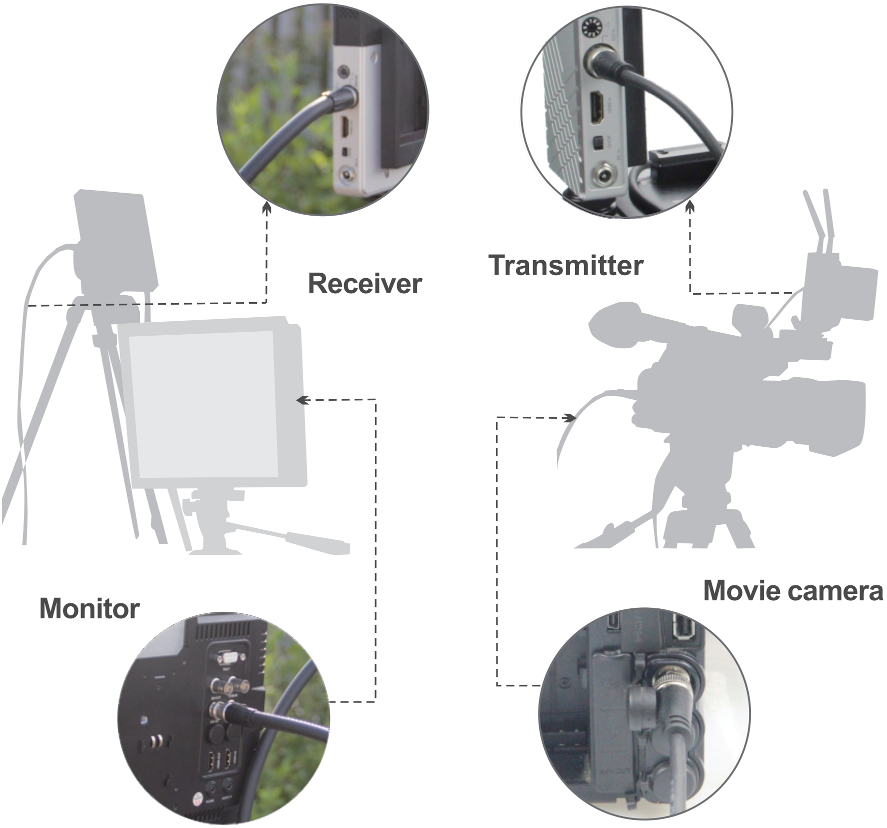


● Typical connection instruction

Connect camera SDI or HDMI output to transmitter SDI or HDMI input port, and the transmitter can fixed in hot-shoe port of the camera. Connect HDM or SDI output port of the receiver to SDI or HDMI input port of the HD monitor. Make sure all antennas and batteries are equipped normally. See below diagram.


Receiver
Transmitter
Monitor
Movie camera

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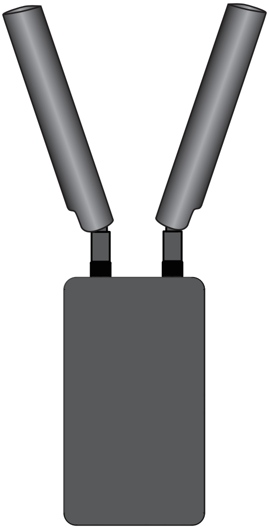
●Getting started

a) Ensure the video source output of the camera is OK, and the HD monitor is power on and switched to connected video input port.

b) Ensure all input, output SDI or HDMI cables are connected.

c) Ensure 2 TX antennas are installed, and it is better to keep TX 2 antennas with orthogonal angle each other for best RF performance. Like below figure.



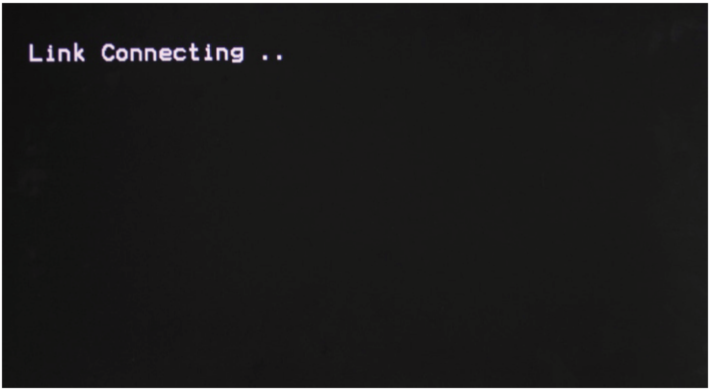
Transmitter

d) Ensure both the transmitter and receiver installed the battery or DC input port connected to outside power source. Then turn power switch of transmitter and receiver to 'ON' respectively, then 'Power' indicator will light.

e) Ensure the frequency knobs of transmitter and receiver are set with the same number, and this will make sure the transmitter and receiver work with same RF frequency.

f) If the camera is on and video input is OK, TX side 'video' indicator will light

g) Before RX finished wireless link with TX, 4 “RSSI” indicators and “Video” indicators are off; when wireless link is OK, “RSSI” indicators will light first, and “RSSI” will indicate the received RF signal strength. If the receiver detects wireless video normal internally from air interface, “Video” indicator will light. Before that, if SDI or HDMI video out port of the receiver has HD monitor connected, it will display an OSD of “Link Connecting……” like below picture.



Link Connecting ..

h)The system will spend 20-30 seconds on constructing the link, and real link period will depend on the current wireless channel condition. When wireless link is set up, “RSSI” light will light and indicate current received wireless signal strength, as well “Video” indicators will light, and then connected HD monitor will display the video and audio accordingly.

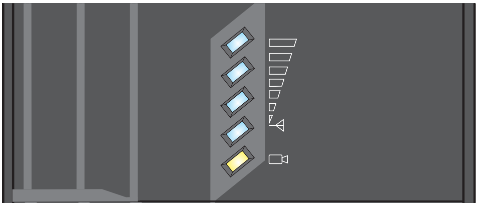
■Input video port selection of transmitter

The transmitter has a 3G SDI video input port and a HDMI video input port, and the system will detect valid video source automatically of SDI and HDMI port, and then switch it as main video input channel. If both SDI and HDMI have valid video input, the system will take SDI input as priority.

■RSSI indicators

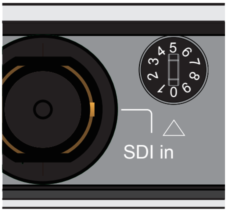
The receiver will calculate received RF signal strength internally and 5 “RSSI” LEDs will be used to indicate wireless signal power and quality. The user can observe the RSSI LED status to know if the current wireless link is reliable or not. From 1 to 5 lit LEDs show RSSI from Min to Max.

Lit RSSI LEDs volume	Wireless Link quality	Video Quality
4	Strong	Best
2-3	Middle	Good
1 or no lit LED	Weak	Visible Video Noise



■Frequency selection and configuration

The wireless suite can work in 5.1-5.9GHz frequency band and be flexibly software configured to licensed or ISM band of global different regions, as well as the side panel of both transmitter and receiver has been installed a frequency select knob, which provide maximum 10 workable frequency channels, and support maximum 4 sets working simultaneously. See below frequency knob figure.



Maintenance

■Storage conditions

Products storage temperature should be -20°C~60°C. For long time storage requirement, please use original carbon boxes, and avoid from high humid, acid base or dusty place.

■Maintenance

Warning

To ensure your safety, place choose original adapters. And provide stable AC input according to this manual.

Trouble shooting

■Normal problems

a)No output on display

Check TX and RX power first, and see if TX or RX battery is existed, then check if TX antenna and RX antenna installed right. After that, check 'Video' indicator, if TX 'Video' indicator is not light, then check SDI or HDMI cable is plugged in and video source is ready please. Finally may check input video format is compatible with this product specs.

b)Poor output video quality

Check if SDI or HDMI input or output cable is plugged well, then check how many receiver side 'RSSI' LEDs is lit, there should be 2-3 RSSI LED lit if the user want to get better video quality; if there is only 1 RSSI LED or no LED lit, that means the received wireless signal is weak, and should decrease the transmission distance or try to change to other frequency channels in case some exist interference.

GHOST-EYE™ WIRELESS HDMI/SDI VIDEO TRANSMISSION SUITE

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